

Determination the Curve Number Catchment by Using GIS and Remote Sensing

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Abstract : In recent years, geographic information systems (GIS) and remote sensing using has increased to estimate runoff catchment. In this research, runoff curve number maps for captive catchment of Tehran by helping GIS and also remote sensing which based on factors such as vegetation, lands using, group of soil hydrology and hydrological conditions were obtained. Runoff curve numbers map was obtained by combining these maps in ARC GIS and SCS table. To evaluate the accuracy of the results, the maximum flow rate of flood which was obtained from curve numbers, was compared with the measured maximum flood rate at the watershed outlet and correctness of curve numbers were approved.

Keywords : Curve number, GIS, Remote sensing, Runoff

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